

ERICA Product Details

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Title:	FY 2007 US OMB PMM DOE SC OASCR Software Metric SC GG 3.1/2.5.2: Improve Computational Science Capabilities
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	The report presents the problems and work conducted to

Description:	satisfy the Department of Energy's (DOE) Office of Advanced Scientific Computing Research (ASCR) program's FY07 software effectiveness measure, part of it's annual Office of Management and Budget (OMB) program goal entered into DOE's Performance Measure Manager (PMM) system at the end of the FY, for the following science and engineering applications: Chimera (linked set of code modules designed to evolve the stellar gas hydrodynamics, the “ray-by-ray-plus” neutrino transport, and the thermonuclear kinetics of stars - augmented by an equation of state for nuclear matter and a self-gravity solver capable of an approximation to general-relativistic gravity), GTC-S (a general geometry gyrokinetic particle simulation code for studying plasma turbulence relevant to tokamak experiments), and S3D (3D Direct Numerical Simulation solver for turbulent reacting flows).
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